1. Do I need to submit drawings with the seismic evaluation report?

Answer: The submittal requirements for the seismic evaluation can be found in Section 1.3, Seismic Evaluation and all subsections which follow. These provisions stipulate that certain drawings and plans are an integral part of the Seismic Evaluation Report. The evaluator shall use drawings, diagrams and details to accurately present the information necessary to communicate evaluated conditions and details of the subject existing building system. The graphical information can be presented in small scale drawings on A and/or B type size drawing sheets (8½×11 or 11×17 respectively) and incorporated in the evaluation report. In cases where larger size drawings are necessary to convey existing building system information, these larger drawings may be appended to the evaluation report. Also, refer to Question #2 below.

2. Can I submit a letter declaring the seismic performance category of a hospital building instead of a detailed seismic evaluation report?

Answer: Sections 2.0.1.2 and 11.0.1.2 list the specific conditions where a hospital facility owner can submit a written declaration and be exempt from submitting either a structural or nonstructural evaluation report. However the matrix of construction information specified in Section 1.3.4.6 shall be submitted pursuant to the requirements of Section 1.3.1. There are no other provisions for exemption from the seismic evaluation report.

3. The continuous operation issue is to be addressed for hospitals that are to remain in existence beyond the 2030 deadline. Since the 2008 milestone relates to life safety performance, why does the NPC 3 category require components that are part of continuous operation systems to be anchored and braced, when located in critical care areas and other support areas critical to patient care?

Answer: The Nonstructural Performance Categories were developed with the intent of establishing various levels of seismic performance for nonstructural equipment, components and systems critical to patient care. The critical distinction between any two NPC categories is not merely the survivability of the facility, but, its level of functionality after a seismic event. Nonstructural components and systems have a lower threshold to seismic forces than structural elements and systems. Buildings in the NPC -3 category are expected to maintain their inpatient population following a moderate earthquake, as well as provide a full array of emergency services to the public. To enable an NPC 3 hospital building to provide these level of services, i.e. beyond mere survivability and able to provide a minimal amount of medical care in specific areas, it is necessary to provide the bracing and anchorage specified in Table 11.1, Nonstructural Performance Categories.

4. Do skilled nursing facility buildings have to meet the requirements of SB 1953?

Answer: Skilled Nursing Facility buildings (SNFs) which are licensed under 1250 (c) of the Health and Safety Code do not have to meet the requirements of SB 1953. Also precluded are hospital buildings that are licensed under Section 1250 (a), General Acute Care, but provide skilled nursing services only. For additional information, refer to response for Question #28.

5. Can a hospital owner submit the seismic evaluation reports without the compliance plans?

Answer: The seismic evaluation report and the compliance plan/schedule may be submitted separately. Section 1.4.3 of the regulations allows for an extension of one year for submittal of the compliance plan upon written request by the hospital owner. However, the separate submittal will also require a separate submittal fee of \$250.

6. Can we get an extension of the deadline for submitting the SB 1953 required documents to OSHPD?

Answer: There are no provisions for late submittal of the seismic evaluation report. However, Section 1.4.3 of the regulations allows for an extension of one year for submittal of the compliance plan upon written request by the hospital owner. This allows for the compliance plan to be submitted to OSHPD as late as January 1, 2002.

7. Can OSHPD extend the 2008 compliance deadline SPC 2/NPC 3 for a hospital building?

Answer: The regulations provide that a hospital owner may be granted a delay of up to five years, granted in one year increments, to comply with the requirements of SPC 2. This regulatory provision is in compliance with the mandate of Health and Safety Code, Section 130060 which states: "A delay. . .may be granted by (OSHPD) upon a demonstration by the (hospital building) owner that compliance (with the provisions) will result in a loss of health care capacity that may not be provided by other . . . hospitals within a reasonable proximity."

Rural acute care hospitals located in the CBC Seismic Zone 3 are allowed until 2013 to have their fire sprinkler systems seismically retrofitted (Refer to Table 11.1, *Nonstructural Performance Categories*). Therefore, such hospitals will not fully comply with the requirements of NPC 3 until 2013. There are no other provisions in the regulations for a delay of the NPC 3 timeframe. Refer to response to Question 11.

8. Do critical care areas such as Emergency Rooms which are not part of the required Basic Services have to meet with the requirements of NPC?

Answer: In Section 1.2, Definitions, the term "Critical Care Area" is defined as "those special care units. . .in which patients are intended to be subjected to invasive procedures and connected to line-operated, electromedical devices." Within this definition, "emergency rooms" is listed as a type of critical care area. The NPC Table 11.1 lists "Critical Care Areas" in NPC 3 as an area where specified components/equipment/systems must meet the bracing and anchorage requirements of Part 2, Title 24. Therefore, "emergency rooms" must meet the requirements as specified in the NPC 3.

9. What if I don't have any existing drawings?

Answer: When performing the structural evaluation for a hospital building without existing drawings or sufficient construction documents, as-built drawings as required by Sections 2.1.2.1.1 and 2.1.2.2.2 shall be rendered to determine the SPC category of the specified hospital building. Refer to Sections 11.2.1.2, Item (d); 11.2.2.2, Item (e) and 11.2.3.2, Item (e), when performing the nonstructural evaluation to determine the NPC category of a hospital building without existing drawings or sufficient construction documents.

Additionally, the Seismic Evaluation Report and Compliance Plan/Schedule submittal process does not require original construction documents, only the information specified in Sections 1.3 and 1.4 and their respective subdivisions.

10. Would a Neurocare Ward (not ICU) with patients hooked up to a ventilator fall under the definition of "critical care"? Also, would a telemetry unit be considered "critical care"area?

Answer: A neurocare ward would be considered a "critical care" area due to the nature of the treatment for the patients placed in them or the type of service provided, e.g., postoperative from brain surgery, etc. A telemetry unit need only be considered for evaluation purposes if it supports a critical care area. In this context, a "telemetry unit" is defined as a group of patient beds with remote monitoring.

11. Are there any special provisions under SB 1953 for rural Acute Care Hospitals?

Answer: Table 11.1, Nonstructural Performance Categories has an exception in NPC 3 which allows general acute care hospitals located in a rural area and within Seismic Zone 3 an extension of up to five years (to January 1, 2013) for complying with the bracing and anchorage requirements for fire sprinkler systems as set forth in NFPA 13, 1994 or subsequent applicable standards. There are no other exemptions from NPC requirements for rural acute care hospitals within the regulations.

Rural & Small Hospitals in Seismic Zone 3

<u>Hospital Facility Name:</u> <u>Notes:</u>

Alta District Hospital Peer Group 5

Barton Memorial Hospital

Biggs-Gridley Memorial Hospital Bloss Memorial District Hospital

Central Valley General Hospital Federal Designation

Chowchilla District Memorial Hospital

Colusa Community Hospital Corcoran District Hospital

Del Puerto Hospital

Dos Palos Memorial Hospital Eastern Plumas District Hospital

Glenn General Hospital

Hanford Community Hospital

Indian Valley Hospital John C. Fremont Hospital

Kingsburg District Hospital Peer Group 5

Lassen Community Hospital Lindsay Hospital Medical Center Mark Twain St. Joseph's Hospital

Marshall Hospital

Mayers Memorial Hospital

Memorial Hospital, Exeter Peer Group 7

Mercy Medical Center, Mt. Shasta

Modoc Medical Center

Needles-Desert Community Hospital

Oak Valley District Hospital Peer Group 5

Palo Verde Hospital Plumas District Hospital

Sanger Hospital Peer Group 5

Selma District Hospital

Seneca District Hospital

Sierra Nevada Memorial Hospital Fed. Desig./Peer Group 5

Sierra Valley Community Hospital

Sierra-Kings District Hospital Peer Group 5

Siskiyou General Hospital

Sonora Community Hospital Peer Group 5

St. Elizabeth Community Hospital Surprise Valley Community Hospital

Sutter Amador Hospital Tahoe Forest Hospital

Trinity Hospital

Tuolumne General Hospital

12. What is the definition of "Central Supply?" Does that mean materials management-type functions or sterile supply-type functions?

Answer: Refer to the California Building Code, Section 420A.22 for minimum requirements of "central sterile supply" area of a hospital. Although this section does not define the term "central supply", it does specify the types of services and equipment which are accommodated by "central supply and sterilizing areas". The California Building Code does not regulate the types of "functions" to be performed within these areas.

13. "Basic Services/Supplemental Services" – The definition of Basic Services in the 1995 CBC (Section 420A.3) differs from the definition of Critical Care areas in Article 1. Which definition do we use?

Answer: For purposes of the SB 1953 regulations, the term "Critical Care Areas" should be applied as defined in the regulations. This definition was tailored specifically for the SB 1953 regulations and delineates specific "high priority" general acute care areas within a hospital building as vital to the continued acute care operation of a facility.

14. Regarding Exhaust Fans – does that mean ALL fans in the system or only those above a certain threshold value? And if so, what is that threshold value?

Answer: Section 10.2.5 specifies the requirements for seismic bracing of mechanical and electrical equipment suspended from the structure. In addition Article 11 requires that mechanical, electrical systems, components and equipment shall meet the anchorage and bracing requirements of Part 2, Title 24.

15. Can a different format be used for the "Compliance Plan Schedule" than the one specified in the regulations if we add a space for the governing codes and the year of construction?

Answer: Section 1.4.4.4 specifies the items required for a complete "Compliance Plan" and Section 1.4.4.5 specifies the information required for the "Existing and Planned Buildings Matrix". An augmented version of these documents is acceptable only if all the *required* items are included in the modified document.

16. One of our hospital buildings does not have fire sprinklers now. If this building is seismically retrofitted to SB 1953, SPC 2 level, will this require us to install a fire sprinkler system? What about SPC 5 level?

Answer: Sprinkler systems fall under the Nonstructural Performance Categories (NPC) and not under the Structural Performance Category (SPC) requirements. Compliance with SB 1953 does not require that fire sprinkler systems be installed where none existed before, *even for SPC 5 conformance*. However, hospital buildings with existing fire sprinkler systems must meet the anchorage and bracing requirements of NPC 3 and NPC 4.

17. We are doing a major SB 1953 retrofit on a hospital building. Will this trigger

compliance with accessibility requirements for disabled persons? Does the answer change if functional service areas are remodeled? Any range on cost to do accessibility changes?

Answer: Where the total construction cost of a retrofit or remodel project does not exceed the most current valuation threshold and the cost of compliance with the accessibility requirements is disproportionate (i.e. exceeds 20% of the total project cost) without the required accessibility features, an "unreasonable hardship" may exist. The Office will use the most current valuation threshold in determining if a retrofit or remodel project would create an "unreasonable hardship". The 1998 valuation threshold is \$86,770.00.

The latest enforceable accessibility requirements for persons with disabilities contained in Part 2, Title 24 apply to any project submitted to the Office for hospital building retrofit or remodel, pursuant to SB 1953 regulations. OSHPD does not have the authority to enforce federal (ADA) accessibility requirements for disabled persons.

18. Can the Evaluation be submitted incrementally (Structural then Non-Structural)? *Answer*: The seismic evaluation report, which includes both the structural and non-structural evaluations, must be submitted as one document. Separate submittal for the structural and nonstructural reports is not permitted.

19. Are there areas within a typical hospital where the Nonstructural Evaluation requirements of SB 1953 do not apply?

Answer: The answer to this question depends on the desired NPC level of performance. Table 11.1, Nonstructural Performance Categories, determines the applicability of the nonstructural evaluation requirements for a hospital. If the desired performance level is NPC 4 or 5, for acute care operation beyond 2030, then all areas of the hospital are subject to the requirements as listed in Table 11.1. However, NPCs 2 and 3 primarily impact critical care areas of a hospital, with adjacent non-critical care areas affected by presence of specific systems (e.g., communications, emergency power, fire alarm and med-gas) as delineated in Table 11.1.

20. Is a separate application and fee required for the OSHPD review of the Compliance plans?

Answer: The Seismic Evaluation Report and Compliance Plan may be submitted simultaneously, in which case, only one application and one \$250 application fee will be required. However, if the Seismic Evaluation Report and Compliance are submitted separately, an application and a nonrefundable application fee of \$250 must accompany *each* submittal document.

Additionally, the hospital owner will be charged a fee for the actual cost of the Office's review and approval of the Seismic Evaluation Report and Compliance Plan. However, these fees will be deducted from *future* construction projects which are in conformance with the OSHPD approved compliance plan.

21. Are single line diagrams required for the location of certain hospital areas?

Answer: The Nonstructural Evaluation Report (see Article 1, Section 1.3.4, Item 2.1) must include single line diagrams for the location of the following: central supply areas, clinical laboratory service spaces, critical care areas, pharmaceutical service spaces, radiological service spaces and sterile supply areas. There are no provisions requiring single line diagrams for other hospital areas.

22. What is meant by "description...where deficiencies are identified" in section 1.3.4 Item 2.2 of Article 1?

Answer: Nonstructural elements and systems which do not meet the requirements of Article 11 should be reported as deficiencies. These deficient systems/elements should be described in the nonstructural evaluation either in narrative or diagrammatic format as specified in Article 1, Section 1.3.4, Item 2.2.

The essential aspects of this description shall include identification and location of deficiencies within specific building systems including but not limited to the mechanical, plumbing and electrical systems of the building and their respective components which fall within the scope of the nonstructural evaluation.

23. Is OSHPD's expectation that an SPC-2 upgrade provides a "Life Safety" level of performance?

Answer: The various levels of structural seismic performance established by SB 1953 include potential collapse hazard (SPC 1) to immediate occupancy (SPC 5) after a seismic event. The SPC 2 subgradation is intended as a "life safety" structural performance level. Specifically, after a seismic event, it is anticipated that an SPC 2 facility will survive the seismic event without jeopardizing lives (i.e., it won't collapse), but it may not be repairable or functional after the event and therefore unable to provide general acute care hospital services.

24. Is OSHPD's expectation that an SPC-5 upgrade provides an "Immediate Occupancy" level of performance?

Answer: The various levels of seismic performance established by SB 1953 include potential collapse hazard (SPC 1) to immediate occupancy after a seismic event (SPC 5). The SPC 5 subgradation is currently the highest level of seismic structural performance. After a seismic event, it is anticipated that an SPC 5 facility will survive, suffering only very limited structural damage and will be able to provide full general acute care patient services, i.e., immediate occupancy.

25. Often in hospital corridors the ceiling space is filled with pipes and conduits. Is it acceptable to create a secondary frame to "catch" the pipes to protect the exiting corridors instead of bracing all the pipes?

Answer: Though catching the pipes is important, it is not the primary issue. In addition to the potential as a falling hazard that the pipes may represent, it is also important to prevent

escape of the pipes contents should the pipes break. Proper anchorage and bracing will reduce movement and shearing of pipes, and thus reduce the possibility of the escape of the contents. Therefore, the anchorage and bracing of pipes and conduits must meet the

requirements of Chapter 16A, Part 2, Title 24. Secondary framing is an option available for pipe bracing, but is dependent on site conditions.

26. Can an SPC-5 hospital building be supplied with utilities emanating from an SPC-1 hospital building?

Answer: An SPC 1 hospital building will cease operation as a general acute care hospital building by January 1, 2008. Therefore, an SPC 1 hospital building which serves as a utility location for other buildings will have to be seismically retrofitted to at least an SPC 2 level to continue providing utility services after January 1, 2008. Additionally, this same building would have to meet SPC 5 requirements to continue serving beyond the year 2030.

27. My SNF is on the third floor of one of my GAC buildings. What are the requirements of SB 1953 for this arrangement?

Answer: The entire building is subject to the SPC requirements. With respect to the NPC requirements, the Skilled Nursing Facility (SNF) area would not be considered "critical care area" under the NPC 3 category for 2008 compliance, but it will be subject to the NPC 4 requirements for 2030 compliance.

28. My SNF building is under GAC license but it is a separate building on the campus. Does SB 1953 require this building to be evaluated?

Answer: The Seismic Evaluation Procedures and Compliance Plan Regulations were developed by OSHPD specifically for implementation by GAC licensed hospital buildings in furtherance of the Alfred E. Alquist Act of Hospital Facilities Seismic Safety Act of 1983. These regulations require GAC licensed hospitals to perform seismic evaluations on their respective facilities and for mitigation of substandard structural and nonstructural conditions by the seismic retrofit (compliance) plan.

In Section 1.2, "Definitions", the term "General Acute Care Hospital" is defined. It states in part the following:

"...a hospital building as defined in Section 129725 of the Health and Safety Code and also licensed pursuant to Section 1250(a) of the Health and Safety Code. . .(but) *It also precludes hospital buildings that may be licensed under the above mentioned code sections, but provide skilled nursing services only.*"

Therefore, a building which contains no GAC licensed beds or services but is used only for SNF beds and services is not subject to the requirements of SB 1953 <u>even</u> though it is under the GAC license. However, the building must be "freestanding and separate" in accordance with the conditions set forth in OSHPD Policy Intent Notice #HSC-129725, revised August 20, 1996. For additional information, refer to Question #36.

29. Clarify as to which buildings fall under SB 1953 especially in those cases where the building contains more than one licensed category of service.

Answer: Though a hospital building may provide different categories of services, OSHPD is not aware of any hospital buildings which are licensed under multiple licensure categories. Section 1.2, Definitions has the term "General Acute Care Hospital" which specifies the types of buildings included under the auspices of SB 1953. This definition states in part that

". . . a hospital building as defined in Section 129725 of the Health and Safety Code and also licensed pursuant to Section 1250(a) of the Health and Safety Code. . .It also precludes hospital buildings that may be licensed under the above mentioned code sections, but provide skilled nursing services only."

Hospital owners have various options under the SB 1953 provisions for the continued use of noncompliant buildings. As part of the compliance plan, hospital owners may choose to remove all acute care services from selected buildings subject to the approval of the Department of Health Services Licensing and Certification Division.

30. We need better clarification of the application of SB 1953 to buildings which house psych units.

Answer: OSHPD is currently working with the Department of Health Services' Licensing and Certification Division to define which SB 1953 requirements, if any, would apply to psych unit buildings under a "general acute care" license.

31. If a Static Nonlinear (Pushover) design approach is used, can the hospital utilize the same engineering specialist that assists with the analysis to provide the peer review functions? (OSHPD Q32)

Answer: No, see Section 1649A.3.1

32. Regarding air handlers that are functionally inadequate and have to be braced, do I have to replace them?

Answer: No, all that is required is that the air handlers be braced and anchored, not replaced.

33. If the intent of SB 1953 NPC 3 is to prevent loss of water from pipes in critical care areas, do we have to brace pipes from the central plant to the critical care areas? We infer the intent to prevent water loss from the valving option permitted. Can we only valve the pipes at the boundaries of critical care?

Answer: Pipes from the central plant supplying or passing through the areas specified in the NPC 3 category do not need to be braced outside the boundaries of those areas. However equipment anywhere in the physical plant that services the NPC 3 specified areas shall be anchored and braced.

NPC 3 Exception 1 permits piping systems not be anchored and braced until 2030 provided that "an approved method of preventing release of the contents of the piping system in the event of a break is provided." Valving the piping system is an acceptable method of preventing the escape of the pipe systems contents in the event of pipe breakage or shearing. The configuration of the valving layout depends on the layout of the piping within the NPC 3 specified areas. It should be noted that valving the pipes only at the boundaries may or may not prevent the release of pipe contents in those areas.

34. Could a policy be established which would clearly delineate the equipment within a hospital that would be affected by SB 1953?

Answer: No. As medical and other types of equipment varies from hospital to hospital, it is impractical to establish a policy with a definitive list of equipment which would be affected by SB 1953. The evaluation procedures and evaluation (appendix) questions delineate the conditions, equipment, systems, and components which fall under the general scope of the seismic evaluation.

35. In Article 11, the NPC process involves first a complete survey, then determining whether OSHPD permit exists, then making an NPC designation. This infers that in a code compliant structure, we have to do the whole survey even though built with full inspection. We cannot rely on OSHPD permit and inspection to designate as compliant. Isn't this backwards? We intended to look for permits first, then survey the non-compliant areas.

Answer: The evaluator is free to perform the nonstructural evaluation in any manner desired. Hospital buildings constructed under a permit issued by OSHPD are deemed to comply with the anchorage and bracing requirements of Title 24, with the exception of the fire sprinklers. For other types of buildings, a review of the available drawings to determine the extent of the nonstructural bracing prior to conducting the site visit is very prudent. Aside from establishing the level of anchorage and bracing required to be expected, it will allow the evaluator to inventory components appearing on the drawings that should be braced. As a rule all major components that require bracing should be shown on the drawings. It is important to note that the evaluation is limited to those systems and components listed in Table 16A-O.

All compliant buildings are not the same. Between 1973 and 1983, the enforcement of the code requirements for nonstructural elements, components and systems was inconsistent. The level of attention given to nonstructural bracing varied tremendously. This is substantiated by the nonstructural failures that occurred in various post-1973 hospitals as a result of the Northridge Earthquake.

In the late 70's and 80's some pre-73 buildings had extensive remodels. The scope of these remodels can vary extensively, from cosmetic alterations to a complete gutting of the space, with reconstruction to current standards. It is not unusual to find braced and unbraced components next to each other in the same space. If the component or system was not modified during the remodel, then it was probably not seismically retrofitted. Only by inventorying the systems can the extent of the seismic bracing be definitively established.

36. If all the general acute care beds are moved into one building and all the SNF beds are moved into and/or remain in the other building, is this other building subject to the requirements of SB 1953?

Answer: No. Even if the SNF beds are listed on the general acute care license, this building is not subject to SB 1953. It is not a hospital building within the meaning of Section 130005(k) of the Health & Safety Code. See also Title 24, Chapter 6, Part 1, Article 1, Section 1.2, Definitions - General Acute Care Hospital - which explicitly excludes hospital buildings that provide skilled nursing services only. However, this building must be physically separate from the building housing GAC services or be separated by a seismic joint. This answer also applies to existing, separate buildings listed on the general acute care license that exclusively contain SNF beds.

Facilities should be aware of the possible Medi-Cal reimbursement consequences of a general acute care hospital providing SNF services in a separate building. Reference should be made to Health and Safety Code Sections 1250.8 and 1254 relating to separate licenses for "separate freestanding facilities" providing SNF services.

Facilities should also be aware that Department of Health Services licensing approval is required before beds or space approved for one use may be used for or converted to another use.

If a new, separate SNF license is required, facilities should consult with OSHPD and Department of Health Services licensing to discuss the means by which they will demonstrate, compliance with Title 24 requirements (including structural) for SNF's. The facility, of course, may request the utilization of alternate means and methods found in Chapter 1, Part 2, Title 24.

Facilities should also be aware of §72205 of Title 22 which requires that "...the licensee shall maintain the skilled nursing facility in a safe structural condition..." and that Department of Health Services may require an evaluation of the structural condition of the building if necessary.